

**Amendments to the Claims:**

This listing of Claims will replace all prior versions, and listings, of Claims in the Application.

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**Listing of Claims:**

Claim 1 (currently amended) A networked optical storage server configured to couple to a plurality of users across a network; and the networked optical storage server comprising:

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- at least one optical storage media;
  - a network module configured to couple to the network for packet based communications with the plurality of users across the network;
  - at least one non-optical memory coupled between the network module and the at least one optical storage media for temporary storage of data packets received from

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  - corresponding ones of the plurality of users; and
  - a processor coupled to the at least one ~~volatile~~ non-optical memory and configured to coalesce in the ~~volatile~~ non-optical memory ~~multiple related~~ data packets each ~~associated with~~ from a corresponding file or datastream ~~received from the plurality of~~ users into a single corresponding aggregate data packet and to write each

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  - corresponding aggregate data packet to the at least one optical storage media, thereby

reducing a number of write operations required to write data to the at least one optical storage media.

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Claim 2 (currently amended) The networked optical storage server of Claim 1, further comprising:

- the at least one ~~volatile~~ non-optical memory including:
  - a first memory for receiving data packets from the plurality of users;
  - 10 ○ a second memory; and
- the processor further configured to ~~coalesce~~ assign virtual file numbers and addresses to the received data packets from the coalesced in either the first  
memory ~~into the single corresponding aggregate data packet in or~~ the second  
memory; and to provide thereby for updating, deleting and reading of data by  
15 corresponding ones of the plurality of users prior to write writing each  
corresponding aggregate data packet in from the second memory to the at least  
one optical storage media.

20 Claim 3 (currently amended) The networked optical storage server of Claim 1, wherein each aggregate data packet further comprises at least one of :

- data corresponding with a single file of data from a plurality of the network packets received from a corresponding one of the plurality of users; and
- 25 • data corresponding with multiple files of data from the plurality of network packets received from corresponding ones of the plurality users.

Claim 4 (previously presented) The networked optical storage server of Claim 1, further comprising:

- a hard drive coupled to the processor; and
- the processor further responsive to a cache policy selection by an administrative one of the users to cache on the hard drive, a cached copy of a selected one of:
  - directories of corresponding file structures stored on the at least one optical storage media;
  - directories and data stored on the at least one optical storage media;
  - and
  - an archived copy of data on the at least one optical storage media, accessible after removal of the at least one optical storage media from the server;

thereby decreasing an amount of time required to provide the corresponding cached copy to the plurality of users.

Claim 5 (previously presented) A networked optical storage server configured to couple to a plurality of users across a network, and the optical storage server comprising:

- at least one optical storage media storing files organized in directories for access by the plurality of users;
- a network module configured to couple to the network for packet based communications with the plurality of users;
- a hard drive; and

a processor coupled to the hard drive, and the processor responsive to a cache policy selection by an administrative one of the users to cache on the hard drive, a selected cached copy of a selected one of:

- directories of corresponding file structures stored on the at least one optical storage media;
- directories and data stored on the at least one optical storage media; and
- an archived copy of data on the at least one optical storage media, accessible after removal of the at least one optical storage media from the server;

thereby decreasing an amount of time required to provide the corresponding cached copy to the plurality of users.

Claim 6 (previously presented) A method executed on an optical storage server configured to couple to a plurality of users across a network, comprising the acts of:

- providing at least one optical storage media;
- coupling to the network for packet based communications with the plurality of users;
- coalescing multiple data packets each associated with a corresponding file or datastream received from the plurality of users into a single corresponding aggregate data packets and
- writing each aggregate data packet coalesced in the coalescing act to the at least one optical storage media, thereby reducing a number of write operations required to write data to the at least one optical storage media.

Claim 7 (previously presented) The method of Claim 6, wherein each single corresponding aggregate data packet coalesced in the coalescing act further comprises at least one of :

- data corresponding with a single file of data from a plurality of the network packets received from a corresponding one of the users; and
- data corresponding with multiple files of data from the plurality of network packets received from corresponding ones of the users.

Claim 8 (previously presented) The method of Claim 6, further comprising:

- providing a hard drive;
- selecting a cache policy for the caching of data on the hard drive; and
- caching on the hard drive, responsive to the selection of cache policy, a cache copy of a selected one of:
  - directories of corresponding file structures on the at least one optical storage media;
  - directories and data stored on the at least one optical storage media; and
  - an archived copy of data on the at least one optical storage media, accessible after removal of the at least one optical storage media from the server;

thereby decreasing an amount of time required to provide the corresponding cached copy to the plurality of users.

Claim 9 (previously presented) A method executed on an optical storage server configured to couple to a plurality of users across a network , comprising the acts of:

- providing at least one optical storage media;
- providing a hard drive;

- coupling to the network for packet based communications with the plurality of users;
- selecting a cache policy for the caching of data on the hard drive; and
- caching on the hard drive, responsive to the selection of cache policy, a cache copy of a selected one of:
  - directories of corresponding file structures on the at least one optical storage media;
  - directories and data stored on the at least one optical storage media; and
  - an archived copy of data on the at least one optical storage media, accessible after removal of the at least one optical storage media from the server;

thereby decreasing an amount of time required to provide the corresponding cached copy to the plurality of users.

Claim 10. (~~withdrawn~~ canceled)